

ROSS AIRCRAFT COMPANY

MODELS: Ross RS-1 and RS-2L

T.C. NUMBER: T.C. 732

I - MODEL RS-1, 2 POLM (Approved 8/28/40)

Engine

Continental A-40-5

Fuel	73 minimum octane aviation gasoline
Engine limits	For all operations, 2575 rpm (40 hp)
Airspeed limits	Level flight or climb - 90 mph True Ind.
	Glide or dive - 122 mph True Ind.
C.G. range	(+20.2) to (+24.8)
Maximum weight	940 lbs.
No. seats	2 (+17, +47) (See NOTE 2.)
Maximum baggage	16 lbs. (-20)
Fuel capacity	9 gallons (-8)
Oil capacity	1 gallon (-33)
Serial numbers eligible	1 and up
Required equipment	1, 102, 201 and 202

II - MODEL RS-2L, 2 POLM (Approved 9/13/48)

(Same as Model RS-1 except for revised engine mount per Rose Drawing No. 10058 Rev. A, change in engine, front lift strut modification per Rose Drawing No. 10037 Rev. C and stabilizer assembly, modification per Rose Drawing No. 10018 Rev. E.)

Engine	Lycoming O-145-B3 (See also item 103.)		
Fuel	73 minimum octane aviation gasoline		
Engine limits	For all operations, 2550 rpm (65 hp)		
Airspeed limits	Level flight or climb - 100 mph True Ind.		
(See NOTE 3)	Glide or dive - 122 mph True Ind.		
C.G. range	(+20.2) to (+24.8)		
Maximum weight	995 lbs.		
No. seats	2 (+17, +47) (See NOTE 2)		
Maximum baggage	16 lbs. (-20)		
Fuel capacity	12 gallons (-7)		
Oil capacity	5 quarts (-32)		
Control surface	Elevator	27 degrees up	26 degrees down
movement	Aileron	20 degrees up	20 degrees down
	Rudder	30 degrees left	30 degrees right
Serial numbers eligible	1 and up		
Required equipment	2, 102, 201, and 204		

SPECIFICATIONS PERTINENT TO ALL MODELS:

Datum	L.E. of wing
Leveling means	Level top longerons between cockpits
Certification basis	Type Certificate No. 732 (CAR 4a)
Production basis	None (See NOTE A)
Export eligibility	Eligible for export as follows, subject to provisions of MOP 2-4:
	(a) Canada
	- Landplane - eligible
	- Skiplane - not eligible
	(b) All other countries except Australia, Great Britain and New Zealand.

EQUIPMENT:

Propellers and Propeller Accessories

- | | RS-1 | RS-2L |
|---|--------------|--------------|
| 1. Propeller - Fixed pitch wood (less hub) rated for required hp and rpm on the following limits:
Static rpm at maximum permissible throttle setting -
Not over 2450 rpm
Not under 2275 rpm
No additional tolerance permitted.
Diameter -
Not over 71 inches
Not under 67 inches | 8 lbs. (+44) | -- |
| 2. Propeller - Sensenich 70LY-36 or any other fixed pitch wood propeller rated for required hp and rpm on the following limits:
Static rpm at maximum permissible throttle setting -
Not over 2300 rpm
Not under 2200 rpm
No additional tolerance permitted.
Diameter -
Not over 70 inches
Not under 68 inches | -- | 9 lbs. (+45) |

Engine and Engine Accessories - Fuel and Oil System
101. (Omitted)

102. Carburetor air heater	2 lbs. (-32)	2 lbs. (-32)
103. Engine - Lycoming O-145-B2	--	-3 lbs. (-25)

Landing Gear (See NOTE 4)

201. Two main wheels assemblies, 7.00-4, Type III, Firestone Models 2AV or 2AVT with 4-ply rating tires.	24 lbs. (+9) 3 lbs. (+183)	24 lbs. (+9) --
202. Tail skid		
203. Two main wheel assemblies, 16x7-3, E.L.P. Type, Goodyear Model 8LMBA with 4-ply rating 16x7-3 tires.	+3 lbs. (+9)	--
204. Steerable tail wheel (Ort-Lancaster Drawings 10056 and 10057)	4 lbs. (+189)	4 lbs. (+189)
205. Two main wheel and brake assemblies, 6.00-6, Type III, Goodyear LSMBD (wheel assembly 511413M, brake assembly 511254A) with 6.00-6, 4-ply rating tires	--	+8 lbs. (+9)

Miscellaneous (not listed above)

601. Cockpit canopy	--	14 lbs. (+40)
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NOTE A. Prior to original certification each aircraft must satisfactorily pass:

- (a) An inspection for workmanship, materials, and conformity before any covering, metal priming or final finish is applied. All woodwork may be varnished.
- (b) A final inspection of the completed aircraft.
- (c) A check of the flight characteristics.

NOTE 1. Current weight and balance report including list of equipment included in certificated weight empty, and loading instructions when necessary, must be in each aircraft at the time of original certification and at all times thereafter (except in the case of air carrier operators having an approved weight control system).

NOTE 2. Placard front cockpit as follows:

"Solo flying from rear seat only."
"4-Ply rating tires - 13 lbs. pressure required."

NOTE 3. For airplane serial number 1 of Model RS-2L, the following placard must be displayed on the instrument panel in full view of the pilot:
"Do not exceed 90 mph Indicated for Level Flight or Climb."
This placard may be removed provided the front list strut is modified per Rose Drawing No. 10037 Rev. C and the stabilizer assembly is modified per Rose Drawing No. 10018 Rev. E.